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L7 4 L6

=> d abs bib hitstr 1-4

L7 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

AB This document discloses a process for the production of acid addition salts of 3-[4-(8-fluoro-5,11-dihydrobenz[b]oxepino[4,3-b]pyridin-11-ylidene]piperidino]propionic acid alkyl esters, characterized by reacting alkyl 3-[4-(8-fluoro-5,11-dihydrobenz[b]oxepino-[4,3-b]pyridin-11-ylidene]piperidino]propionate with an acid; and a process for the production of 3-[4-(8-fluoro-5,11-dihydrobenz[b]oxepino[4,3-b]pyridin-11-ylidene)piperidino]propionic acid by using the above acid addition salt as the intermediate. Thus, treatment of St 3-[4-(8-fluoro-5,11-dihydrobenz[b]oxepino-[4,3-b]pyridin-11-ylidene)piperidino]propionate (I) in ethanol with HCl in Et acetate qave I.HCl.

AN 2004:902387 CAPLUS

DN 141:379912

TI Process for preparation of dihydrobenz[b]oxepino[4,3-b]pyridin-11ylidene)piperidino]propionic acid alkyl esters acid salts and dihydrobenz[b]oxepino[4,3-b]pyridin-11-ylidene)piperidino]propionic acid derivative

IN Uda, Junichiro; Sasaki, Tomomitsu; Sato, Takahiro; Inoue, Tsutomu

PA Fujiyakuhin Co. Ltd., Japan

SO PCT Int. Appl., 22 pp. CODEN: PIXXD2

DT Patent

LA Japanese

FAN. CNT 1

ran.	PATENT NO.			KIND DATE			APPLICATION NO.												
PI							WO 2004-JP5304												
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KΡ,	KR,	ΚZ,	LC,	
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
			NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
								TZ,											
		RW:						MW,											
								ΤJ,											
								HU,											
					BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	
	TD, TG AU 2004230380																		
		CA 2521831		A1 20060111			CA 2004-2521831 EP 2004-727399 GB, GR, IT, LI, LU, NL,					20040414							
		R:																	
								RO,											H
	US 20060217556					CN 2004-80009854													
							US 2005-553034					20051011							
PRAI		2003																	
		2004						2004	0414										

OS CASREACT 141:379912

IT 153250-06-7P

RL: IMF (Industrial manufacture); PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

19/05/2008 Page 2

(Reactant or reagent)

(preparation of dihydrobenz[b]oxepino[4,3-b]pyridin-11-

ylidene)piperidino|propionic acid alkyl esters acid salts and dihydrobenz[b]oxepino[4,3-b]pyridin-11-ylidene)piperidino]propionic

acid derivative)

RN 153250-06-7 CAPLUS

1-Piperidinepropanoic acid, 4-(8-fluoro[1]benzoxepino[4,3-b]pyridin-11(5H)-CN vlidene) -, ethvl ester (CA INDEX NAME)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 2 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN L7

Ι

AB Title compds. I [X = CH, N; X' = CH2, O; X'' = inert group; Y = Z; R = (esterified or amidated) carboxvalkyl, alkyl, (esterified or amidated) CO2H] are prepared by reaction of I (Y = O) with ZO (R = esterified or amidated carboxyalkyl, alkyl, esterified or amidated CO2H) in the presence of low-valent Ti compds. and optional hydrolysis. I (X = N, X' = O, X'' = 8-F, Y = 0) (228.7 mg) was treated with tert-Bu $3-(4-\infty)$ v1)propionate in the presence of low-valent Ti reagent (prepared from TiC14 and Zn) in THF under reflux for 20 min to give 269.2 mg I ($\hat{X} = N$, X' = 0, X'' = 8-F, Y = Z, R = CH2CH2CO2CMe3). 2002:900817 CAPLUS

AN

DN 138:4593

Preparation of antiallergic piperidylidenebenzoxepines or their intermediates

19/05/2008 Page 3

- IN Sasaki, Tomomitsu; Sato, Takahiro; Ameda, Junichiro; Inoue, Tsutomu
- PA Fuji Yakuhin Co., Ltd., Japan
- SO Jpn. Kokai Tokkyo Koho, 6 pp.
- CODEN: JKXXAF
- DT Patent LA Japanese
- FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
PI JP 200233857	4 A	20021127	JP 2001-149896	20010518		
JP 3548133	B2	20040728				
PRAI JP 2001-14989	96	20010518				

- OS MARPAT 138:4593
- IT 153250-06-7P
 - RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
 - (preparation of antiallergic piperidylidenebenzoxepines or their intermediates)
- RN 153250-06-7 CAPLUS
- CN 1-Piperidinepropanoic acid, 4-(8-fluoro[1]benzoxepino[4,3-b]pyridin-11(5H)-ylidene)-, ethyl ester (CA INDEX NAME)

 $\mbox{L7} \mbox{ } \mbox{ANSWER 3 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN GI$

19/05/2008 Page 4

AB An important approach to the design of antiallergic agents with reduced penetration into the central nervous system (CNS) is described. A series of 3-[(5,11-dihydro[1]benzoxepino[4,3-b]pyridin-11vlidene)piperidino|propionic acid derivs. and related compds. were synthesized and evaluated for antiallergic activity and penetration of a

compound into the CNS in comparison with the corresponding 6H-dibenz[b,e]oxepin derivative Combination of zwitterionization and introduction of a pyridine component resulted in an increase in antiallergic activity and a great reduction of penetration into the CNS, which was evaluated by the selectivity (B/A) of antihistaminic activities in the central system [ID50 value (B) for ex vivo H1 binding to mouse brain membranes] and in the peripheral system [ED50 value (A) for inhibitory effect on histamine-induced increase in vascular permeability in mice]. This surprising reduction of penetration into the CNS could be considered on the basis of an increase in hydrophilicity caused by both of the zwitterionization and the introduction of a pyridine component. 3-[4-(8-Fluoro-5,11-dihydro[1]benzoxepino[4,3-b]pyridin-11-

ylidene)piperidino]propionic acid (I) exhibited a strong antiallergic effect in various exptl. models and very low penetration into the CNS. Compound I (HSR-609) is now under clin. trial as a promising antiallergic

agent with greatly reduced penetration into the CNS. AN 1995:319998 CAPLUS

Ι

DN 122:187448

OREF 122:34339a,34342a ΤI Amphoteric Drugs. 3. Synthesis and Antiallergic Activity of

- 3-[(5,11-Dihydro[1]benzoxepino[4,3-b]pyridin-11ylidene)piperidino]propionic Acid Derivatives and Related Compounds ΑIJ Iwasaki, Nobuhiko; Ohashi, Tetsuo; Musoh, Keiichi; Nishino, Hiroyuki;
- Kado, Norivuki; Yasuda, Shingo; Kato, Hideo; Ito, Yasuo CS Research and Development Division, Hokuriku Seivaku Co. Ltd., Katsuvama,
- 911, Japan SO Journal of Medicinal Chemistry (1995), 38(3), 496-507
- CODEN: JMCMAR; ISSN: 0022-2623
- American Chemical Society PB
- DT Journal
- LA English
- 153250-06-7P
 - RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation): RACT (Reactant or reagent)
 - (synthesis and antiallergic activity of [(dihydrobenzoxepinopyridinylid ene)piperidino]propionic acid derivs. and related compds.)

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- RN 153250-06-7 CAPLUS
- CN 1-Piperidinepropanoic acid, 4-(8-fluoro[1]benzoxepino[4,3-b]pyridin-11(5H)ylidene)-, ethyl ester (CA INDEX NAME)

L7 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

GI

AB The title compds., such as [(benz[b]oxepino[4,3-b]pyridin-11-ylidene)piperidinyl]alkanoates and [(benzo[b]pyrano[3,2-b]pyridin-11-ylidene)piperidinyl]alkanoates, I (RI = hydrogen, halo; X = oxygen, CH, OCH2, etc.; Y = alkylene) and their uses as antihistaminics and antiallergics and for the treatment of bronchial asthma are claimed. For example, 3-[4-6,5,11-dihyrobenz[b]oxepino[4,3-b]pyridin-11-

ylidene)piperidinyl]propionic acid (II) was prepared from Et 4-(5,11-dihydrobenz[b]oxepino[4,3-b]pyridin-11-

- AN 1994:164249 CAPLUS
- DN 120:164249
- OREF 120:28987a,28990a
- TI Amphoteric tricyclic compounds as antihistaminic and antiallergic agents

TT

- IN Ito, Yasuo; Kato, Hideo; Yasuda, Shingo; Kado, Noriyuki; Iwasaki, Nobuhiko; Nishino, Hiroyuki; Takeshita, Makoto
- PA Hokuriku Pharmaceutical Co., Ltd., Japan

ylidene)piperidinecarboxylate.

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SO Eur. Pat. Appl., 38 pp.

CODEN: EPXXDW

DT Patent LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	EP 556813 EP 556813		19930825 19971126	EP 1993-102518	19930218	
	R: AT, BE, CH,	DE, DK,	ES, FR, GB,	IT, LI, NL, SE		
	JP 06192263	A	19940712	JP 1993-23400	19930120	
	JP 2974529	B2	19991110			
	CA 2089207	A1	19930821	CA 1993-2089207	19930210	
	CA 2089207	C	19970429			
	US 5334594	A	19940802	US 1993-15812	19930210	
	AU 9333097			AU 1993-33097	19930217	
	AU 655869		19950112			
	AT 160566		19971215	AT 1993-102518	19930218	
	ES 2111086			ES 1993-102518	19930218	
	KR 140504		19980601	KR 1993-2377	19930220	
PRAI	JP 1992-69404		19920220			
	JP 1992-137602		19920501			
	JP 1992-137605		19920501			
	JP 1992-273506		19920918			
	JP 1992-321467	A	19921106			
OS	MARPAT 120:164249					
TT	153250-06-7P					

RN

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as antihistaminic and antiallergic)

153250-06-7 CAPLUS

CN 1-Piperidinepropanoic acid, 4-(8-fluoro[1]benzoxepino[4,3-b]pyridin-11(5H)ylidene) -, ethyl ester (CA INDEX NAME)